

MEDB 1.13 Body Mass Measurement

3.2 Medical Requirements Overview

TABLE 3.2: MEDICAL REQUIREMENTS OVERVIEW

MEDB# and Title:	MEDB 1.13 Body Mass Measurement
Sponsor:	Medical Operations
IPT:	N/A
Category:	Medical Requirements
References:	SSP 50667 Medical Evaluations Document (MED) Volume B
Purpose/Objectives:	To monitor body mass changes in-flight
Measurement Parameters:	Body mass
Deliverables:	Assessment of body mass during long duration flights
Flight Duration:	> 30 days
Number of Flights:	All long duration flights
Number and Type of Crew Members Required:	All Crewmembers
Other Flight Characteristics:	N/A

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3.3 Preflight Training - Training on the use of the Mass Measurement Device (MMD) is scheduled and conducted by the GCTC personnel in Star City.

3.4 Preflight Activities – N/A

3.5 In-flight Activities

TABLE 3.5.1: IN-FLIGHT ACTIVITIES

In-Flight Activity	Description:	Body mass will be measured in-flight using the Russian Mass Measurement Device (MMD).				
	Schedule:	Activity:	Duration:	Schedule:	Flexibility:	Personnel Required:
		Body Mass Measurement	Setup 10 min. Activity 5 min/crew Stow 10 min	During the first week baseline, then monthly thereafter; and as clinically indicated	Contact GMO	Crewmembers
Procedures:	In-flight procedures can be found within the Russian Operations Data File (RODF), Service Module, Medical Operations Book 2, MO-8 Body Mass Measurement.					
Constraints / Special Requirements:	CM 1 performs setup/stow and activity; other CMs perform only the activity					
Photo / TV Requirements:	N/A					
Mission Extension Requirements:	N/A					
Landing Wave-Off Requirements:	N/A					
Data Delivery	Results are forwarded securely by the GMO to the NASA BME Data Specialist. The results are then archived within the Mission Extended Medical Enterprise (MEME) environment and distributed to the Crew Surgeon and Clinical Nutrition Laboratory (MEDB N3.06).					

TABLE 3.5.2: IN-FLIGHT HARDWARE

Hardware/Software Name
Russian Mass Measurement Device

3.6 Postflight Activities – N/A

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3.7 Summary Schedule

TABLE 3.7: SUMMARY SCHEDULE

ACTIVITY	DURATION		SCHEDULE	FLEXIBILITY	PERSONNEL REQUIRED	CONSTRAINTS
Preflight Training						
Body Mass Measurement Device	To be scheduled by the GCTC			Contact GCTC	Crew and GCTC personnel	N/A
Preflight : N/A						
In-flight						
Body Mass Measurement	Setup Activity Stow	10 min. 5 min/crew 10 min	During the first week baseline, then monthly thereafter; and as clinically indicated	Contact GMO	Crewmember	N/A
Postflight : N/A						
Postflight Debrief - N/A						